DoD Space Planning Criteria for Health Facilities
Surgery (Inpatient and Ambulatory)

Surgery (Inpatient and Ambulatory):

This section provides guidance for the space planning criteria for inpatient and ambulatory surgical activities in DoD medical facilities. Every attempt should be made to co-locate these Services in order to share staff, support and mechanical spaces.

This section does not pertain to Intensive Care space planning. Intensive Care planning is found in the Section 4.1, Nursing Units, of this manual. Also, this section does not pertain to Specialty Surgical Clinics, which are in Section 3.11, Specialty Surgical Clinics, of this manual.

4.4.2. DEFINITIONS:

Ambulatory Operative Procedure - A surgical procedure which does not require complicated anesthesia or post-operative care as defined by the facility, and can be performed on a patient that will remain in a medical facility for less than 24 hours.

Average Time Per Procedure - The total average time to perform all of the following activities: room set-up, anesthesia induction, surgery and room cleanup.

General Operating Room - An operating room designed and equipped to perform a wide variety of operative procedures. This includes enodoscopic surgery, which is defined as therapeutic surgical procedures using endoscopic equipment and requiring anesthesia support.

Infection Control Risk Assessment (ICRA) - An ICRA is a determination of the potential risk of transmission of various agents in the facility. See section 5.1 of *Guidelines for Design and Construction of Hospital and Health Care Facilities* of the AIA.

Inpatient Operative Procedure - A surgical procedure performed on a patient who must remain in the medical facility for a greater than or equal to 24 hours.

Operating Room Control (or nursing station)- The Operating Room Control is the area within the surgical suite for clinical staff to supervise the Operating Rooms.

Patient Holding Area / Patient Preparation Cubicle - adjacent to OR's where patient can be held, prepared for surgery, have IV's started, and be placed on cardiac monitor.

Post Anesthesia Care Unit (PACU) – The area where patients who have received anesthesia for a surgical procedure are closely monitored as they recover from that event for Phase I and Phase II. Phase I PACU recovery is typically associated with general anesthesia and the period immediately following surgery. Phase II is an area where outpatients are closely monitored after they have transferred from Phase I, or after surgery not involving general , spinal or epidural anesthesia. This area includes a combination of stretchers and chairs, nourishment room and patient toilets. Patients stay in this area until they are ready for discharge.

Post Anesthesia Care Unit (PACU) Control (or nursing station) - is the location to monitor patients in PACU.

Pre-op Control (or nursing station) - is where patients are monitored preoperatively.

DoD Space Planning Criteria for Health Facilities

Surgery (Inpatient and Ambulatory)

Reception - The main entry into either anesthesia/pre-op area or the surgical suite, depending the design of the facility. This is the meeting and greeting, scheduling and entry location for the public (patients and family).

Restricted Area - This area includes operating and procedure rooms, the clean core, and scrub sink areas. Surgical attire and hair coverings are required. Masks are required where open sterile supplies or scrubbed persons may be located.

Semi-restricted Area - This area includes the peripheral support areas of the surgical suite and has storage areas for clean and sterile supplies, work areas for storage and processing of instruments, and corridors leading to the restricted areas of the surgical suite. Traffic in this area is limited to authorized personnel and patients. Personnel are required to wear surgical attire and cover all head and facial hair.

Special Operating Room - An operating room designed to perform a specific type of operative procedure such as orthopedic surgery, thoracic surgery, transplant or neurosurgery.

Sterile/clean core: In the restricted area of the operating suite. This acts as a service area between two or more operating rooms. This is where warming cabinets and sterile supplies used in the operating rooms are kept. This area must not provide for cross traffic of staff and supplies from the decontaminated/soiled areas to the sterile/clean areas.

Surgery Students – Students such as nurse anesthetist students, operating room technician students, or operating room nurse students. Small workspaces for these types of students (if present) need separate areas.

Surgical Suites - Includes space for the following functional areas: operating rooms, anesthesia, administration, support activities and staff facilities.

Surgical Suites and Levels of Care - *(From the Guidelines for Design and Construction of Hospitals and Health Care Facilities, AIA)* The size of the surgical procedure rooms is dependent on the level of care to be provided. The level of care as defined by the American College of Surgeons are as follows:

Class A: Provides for minor surgical procedures performed under topical, local, or regional anesthesia without pre-operative sedation. Excluded are intravenous, spinal, and epidural routes; these methods are appropriate for Class B and Class C facilities**.**

Class B: Provides for minor surgical procedures performed in conjunction with oral, parenteral, or intravenous sedation or under analgesic or dissociative drugs.

Class C: Provides for major surgical procedures that require general or regional block anesthesia and support of vital bodily functions.

Unrestricted Area - This area includes a reception established to monitor the entrance of patients, personnel, and materials.

DoD Space Planning Criteria for Health Facilities
Surgery (Inpatient and Ambulatory)

4.4.3. POLICIES:

Suite Size and Composition - Any medical facility authorized a surgical suite will have a **minimum of two operating rooms** regardless of workload or utilization rate. The surgical suite shall be divided into three designated areas - unrestricted, semi restricted, and restricted -- that are defined by the physical activities performed in each area.

The number of **General Operating Rooms** programmed for DoD Medical Facilities will be sufficient to provide a 75% utilization rate during the normal duty day. Include all endoscopic procedures to be performed in the surgical suites. Endoscopic surgery is defined as therapeutic surgical procedures using endoscopic equipment and requiring anesthesia support.

Patients will be counseled by an anesthesiologist or anesthetist prior to surgery. On the day of surgery, ambulatory patients will report to a pre surgery holding area. Surgery patients will be recovered in two phases. Phase I recovery will occur in the PACU and is typically associated with general anesthesia, spinal and epidural anesthesia, and the period immediately following surgery. Phase II will occur in PACU.

Residents - While surgical residents spend a considerable amount of time in the surgical suite, space for their offices and training is provided in their separate surgical clinics. Anesthesia residents' offices and training support space is provided in the area of the operating rooms, when an anesthesia residency program is present.

Staff Support - Lockers. Provide lockers to accommodate all surgical personnel (i.e. anesthesia, recovery, MD's, consultants, admin, support staff). Minimum = 2 locker rooms (one male/one female). See also Section 6.1.

Lounge / Conference Rooms - Minimum of one lounge in Surgical Suite and one in Post Anesthesia Care Unit. Provide a conference room if staff exceeds 10. See Section 6.1 for correct sizing. Locate staff lounge in a semi-restricted area and conference room in either a semi or non-restricted area.

4.4.4. PROGRAM DATA REQUIRED:

4.4.4.1. General Operating Rooms

- Programmed number of surgical procedures per day. Include enodoscopic procedures performed in the surgical suite (outside of a clinic). Do not include Cardio/Neuro/Cysto/Ortho workload.
- Average time per surgical procedure.

Determine if all or any of the current workload in the following clinics will be accomplished in the surgical suite in the future or if current surgical suit workload will be accomplished in clinics in a future facility: Dental, OB-GYN, General Surgery, Ophthalmology, ENT, Plastic Surgery. If it is projected that this workload will be accomplished in surgical suite, then include those procedures, if it will be accomplished in a clinic, then exclude that workload.

4.4.4.2. Special Operating Rooms
- Projected number of Neuro. surgical procedures per day
- Average time per Neuro. surgical procedure

- Projected number of Cardio surgical procedures per day
- Average time per Cardio surgical procedure

- Projected number of Ortho surgical procedures per day
- Average time per Ortho surgical procedure

- Projected number of Cysto. surgical procedures per day
- Average time per Cysto. surgical procedure

4.4.4.3. Miscellaneous
- Number of heart lung machines (only required if open heart surgery mission).
- Number of radiographic systems authorized?
- Number of fluoroscopy systems authorized?
- Number of "on-call" personnel who must be resident on 24-hour shifts.

4.4.4.4. Staffing numbers:
- Providers (Surgery Skills)
- Administrative staff
- Receptionist
- Secretary
- Instructors
- Anesthesiologists (MDs)
- Anesthesiology residents
- Nurse Anesthetists
- Student Nurse Anesthetists
- Operating Room Nurses
- Operating Room Nurse Students
- Surgical Technicians
- Surgical Technician Students
- Housekeepers

Is there a Residency Research Technician assigned?

DoD Space Planning Criteria for Health Facilities
Surgery (Inpatient and Ambulatory)

4.4.5. SPACE CRITERIA:

A. Surgical Services
Every attempt should be made to co-locate Inpatient and Ambulatory Surgical Services. Co-location offers the ability to transfer staff according to workload between the two Surgical Services and decreases support space requirements. Support space includes anesthesiology office space, post anesthesia recovery, staff and public facilities, mechanical spaces, etc.

Section 4.4 has not been divided into Inpatient and Ambulatory Surgical Services. In the cases of a renovation project where co-location is not feasible or the case of an Ambulatory Surgical Services in a stand alone clinic, the same criteria should be applied as is presented in this section. The programmer must pay particular attention to the comments section of the criteria.

Toilets, Lounges and Locker Areas: The criteria for toilets, lounges and locker rooms are provided in Section 6..

Administrative Offices: The office space required to provide administrative support to operate the clinic services will be provided in accordance with criteria for administration in Section 2.1.

NOTE: GP indicates that a guideplate exists for that particular Room Code.

FUNCTION	Room Code	AUTHORIZED		PLANNING RANGE/COMMENTS
		m^2	nsf	
Anesthesia Counseling Area:				In small facilities with two ORs the area may be combined with the PACU area.
Patient Reception (GP)	RECP1	16.72	180	This space is for patient control.
Waiting Area	WRC01	11.15	120	Minimum (16 NSF per seat, 4 seats per OR). Provide area for infectious patient in accordance with the ICRA.
Public Toilets, Single Occupancy (GP)	TLTF1	5.57	60	See Section 6.1. If this area supports more than 4 OR's, then provide separate male and female single occupancy toilets.
Exam Room (GP)	EXRG1	11.15	120	Army/Air Force. Minimum. One per every two ORs.
	EXRG2			Navy.
EKG Room (GP)	OPEC1	11.15	120	One per every four ORs. Confirm that this service is part of the Surgical Suites' in clinic concept of operation.
Laboratory Drawing Area (GP)	LBVP1	5.57	60	Minimum. Add an additional 60 nsf for each OR above four. Confirm that this service is part of the Surgical Suites' in clinic concept of operation.

DoD Space Planning Criteria for Health Facilities

Surgery (Inpatient and Ambulatory)

FUNCTION	Room Code	AUTHORIZED		PLANNING RANGE/COMMENTS
		m^2	nsf	
Family Waiting Area:				
Family Waiting Room	WRF01	11.15	120	Minimum area for two ORs. Add 40 nsf for each OR above two.
Vending Area	BX001	3.72	40	Provide one such area when there are four or more operating rooms.
Family Counseling Room	OFDC2	11.15	120	Minimum. Add a second room if more that four ORs and a third room if more than 8 ORs.
Family Toilet (single occupancy) (GP)	TLTU1	5.57	60	One per family waiting area. Provide separate male and female toilets if waiting area supports more than 4 ORs.
Pre-Op/Patient Holding:				Ambulatory patients report to this area to change and then wait in the patient holding room. Provide additional space for infectious patients in accordance with the ICRA.
Patient Sub waiting Room	WRC01	11.15	120	Minimum area for four ORs. Add 40 nsf for each OR greater than four. Consider concept of operations.
Patient Prep./Induction (GP)	ORPP1	33.44	360	Minimum. 1.5 stations per OR. Each station is 120 nsf. This area may be combined with the recovery area. It must be under visual control of the nursing staff.
Litter hold	WRL01	7.43	80	One per four ORs
Patient Toilet (GP)	TLTU1	5.57	60	One per four ORs
Dressing Rooms (GP)	DR001	5.57	60	One per two ORs
Patient Personal Property Lockers (GP)	LR001	3.72	40	One per four ORs
Mediprep Alcove (GP-Phase III)	MEDP1	3.72	40	Minimum. One per patient prep./induction area.
Patient Changing Rooms:				For ambulatory patients only.
Female Changing Room	LR002	7.43	80	Minimum for two ORs. Add 60 nsf for each 2 ORs above 2.
Changing Room Toilet (Female) (GP)	TLTU1	5.57	60	One per Female Changing Room.
Male Changing Room (GP)	LR002	7.43	80	Minimum for two ORs. Add 60 nsf for each 2 ORs above 2.
Changing Room Toilet (Male) (GP)	TLTU1	5.57	60	One per Male Changing Room.
Clean Supply/Linen (GP)	UCCL1	5.57	60	Minimum for two ORs. Add 10 nsf of each OR above 2.
Soiled Utility (GP)	USCL1	7.43	80	Per pre-surgery patient holding area.
OR Prep-Hold Workstation	ORPH2	3.72	40	

DoD Space Planning Criteria for Health Facilities
Surgery (Inpatient and Ambulatory)

FUNCTION	Room Code	AUTHORIZED		PLANNING RANGE/COMMENTS
		m^2	nsf	
Surgical Suite:				
General Surgery Operating Room (GP)	ORGS1	45.06	485	See Section 4.4.6.
Special Operating Rooms:				
Cardiac Operating Room	ORCT1	62.71	675	See Section 4.4.6..
Cardiac Room Storage	ORCM1	9.29	100	One per two cardiac ORs .
Heart Lung Pump Room	ORHL1	13.94	150	Minimum or 50 NSF per heart/lung pump. Provide only if open-heart surgery is authorized.
Cystoscopic Operating Room (GP)	ORCS1	45.06	485	Coordinate location with Urology Clinic.
Neurosurgerical Operating Room (GP)	ORNS1	62.71	675	See Section 4.4.6.
Neurosurgical equipment storage	ORNE1	13.94	150	One per Neuro. OR.
Neurosurgical Monitoring	ORNM1	9.29	100	One per two Neuro. ORs
Orthopedic Operating Room (GP)	OROS1	62.71	675	See Section 4.4.6.
Orthopedic Equipment Storage	OROE1	11.15	120	Per Ortho OR
Plaster Cast Storage	ORPC1	6.50	70	One per two Ortho ORs.
Scrub Area(s) (GP)	ORSA1	6.50	70	One per two OR's. Each scrub area includes two double hand sinks
Medication Storage (GP-Phase III)	MEDP1	5.57	60	One per four ORs
Substerile Area(s) (GP)	ORSR1	13.94	150	One per two OR's.
Sterile Core	**NEW**	37.16	400	One per two ORs. If total number of ORs. is two, or if there is any remainder of OR's beyond clusters of four.
	NEW	69.68	750	One per every four OR's if there is a number of OR dividable by four.
Decontamination/ Cleanup Area (GP)	ORDA1	11.15	120	One per two OR's.
Crash cart storage	RCA01	3.72	40	Includes space for two crash carts per every four OR's.
Surgical Suite Nurse Station (GP)	NSTA3	11.15	120	One per four OR's.
Cart Lift Access	CSCQ1	9.29	100	One per OR suite.
Case Cart Storage	CSCQ1	3.72	40	Minimum. 20 nsf per each OR greater than two. If no dedicated cart lift access, increase case cart storage to 30 nsf per OR.
Mobile Rad. Storage unit	XRM01	3.72	40	Per mobile rad unit.
Mobile C-Arm Storage	XRM02	3.72	40	Per mobile c-arm unit.
X-Ray film Processing (GP)	XFP01	9.29	100	Authorized, if > four OR's or Cysto. OR.
Equipment Storage	SRE01	23.23	250	Minimum. Add 75 nsf for each additional OR greater than three.
Equipment Cleanup Area	OREC1	9.29	100	Minimum, or 50 NSF per OR. Maximum 250.
Clean Storage/ Work Area	ORCW1	13.94	150	One per OR suite.
Clean Linen Storage (GP)	UCCL1	4.65	50	Minimum. 50 nsf per four OR's.
Trash/ Soiled Linen (GP)	UTLC1	12.08	130	Minimum. 25 nsf per OR, maximum 200.
Janitors Closet	JANC1	5.57	60	Minimum, One per four ORs
Housekeeping Equipment/Supply	SRSE1	9.29	100	Minimum. One per every four OR's.
Gurney Storage	SRLW1	1.86	20	One per OR.

DoD Space Planning Criteria for Health Facilities

Surgery (Inpatient and Ambulatory)

FUNCTION	Room Code	AUTHORIZED		PLANNING RANGE/COMMENTS
		m^2	nsf	
Post Anesthesia Care Unit (PACU):				
Recovery Room (Adult), Phase I (GP)	RRSS1	22.30	240	Minimum. 120 NSF per bed. 1 recovery bed per OR.
Nourishment station (GP)	NCWD1	9.29	100	One per PACU.
Patient Toilet (GP)	TLTU1	5.57	60	Phase I: One per 20 beds or fraction thereof. Phase II: One for first 10 Recovery Stations. If greater than 10 Recovery Stations, then one male and one female per 20 beds or fraction thereof. Section 6.1.
Isolation Room	RRIR1	11.15	120	One per unit. This may be deleted or increased, based on the ICRA.
Isolation Toilet (GP)	TLTU1	4.65	50	One per isolation room.
PACU Nurses' Station (GP)	NSTA3	11.15	120	One per PACU.
Dedicated PACU Staff Toilet (GP)	TLTU1	5.57	60	One per PACU.
Mediprep (GP-Phase III)	MEDP1	5.57	60	Minimum. 60 nsf per every additional 20 recovery beds greater than 20.
Crash Cart	RCA01	3.72	40	NSF. Includes space for two crash carts per recovery room.
Ice Machine	ICE01	.93	10	One per PACU.
Clean Supply (GP)	UCCL1	9.29	100	Minimum (10 NSF/bed). Maximum 200 nsf.
Soiled Utility (GP)	USCL1	5.57	60	One per PACU.
Trash/Soiled Linen	UTC01	4.65	50	Minimum (5 NSF/bed).
Phase II Recovery Cubicle (GP)	RROP1	44.59	480	Minimum, for two ORs. 120 nsf per each cubicle (seat or bed). two per recovery cubicles (seat or bed) per Phase II OR.
Consultation Room (GP-Phase III)	OFDC1	11.15	120	Per 20 beds or fraction thereof.
Physician's Workroom	WRCH1	11.15	120	If more than four OR's.
Nurses' Workstation	WRCH1	11.15	120	Minimum. Add 40 nsf for each nurse above four assigned to the day shift.
Equipment Storage	SRSE1	3.72	40	One per OR.
Nurse Supervisor – Recovery Room	OFA01	11.15	120	Single office, Standard Office Furniture. Only if FTE is authorized.
	OFA02			Single office, System Office Furniture
Splint and Crutch Storage	SRCS1	5.57	60	Minimum, one per PACU suite
Janitors' Closet	JANC1	5.57	60	Minimum one per PACU suite

DoD Space Planning Criteria for Health Facilities

Surgery (Inpatient and Ambulatory)

FUNCTION	Room Code	AUTHORIZED m^2	AUTHORIZED nsf	PLANNING RANGE/COMMENTS
Surgery, PACU, Anesthesia Lockers, Toilets and Lounge:				**See also Section 6.1.**
Staff Locker Rooms (GP)	LR002	9.29	100	Minimum. Add 7 nsf for each programmed FTE over eight (on peak shift).
Staff Toilets, single occupancy (GP)	TLTU1	5.57	60	Minimum. Increase by one additional toilet for every 15 FTE (on peak shift) greater than 15.
Staff Shower	SHR01	5.57	60	Minimum: provides for one shower. Increase by one additional shower for every 15 FTE (on peak shift) greater than 15.
Staff Lounge (GP)	SL001	13.01	140	Minimum. Add 5 nsf for each programmed FTE over 8 (on peak shift).
Anesthesia:				
Chief of Anesthesiology	OFA02	11.15	120	One per OR Suite.
Chief Anesthetist	OFA02	11.15	120	One per OR Suite.
Workstation Anesthesiologists	OFA03	5.57	60	System Furniture Cubicle. Consolidate each four or few workstations into single rooms. One workstation per programmed FTE.
Workstation Nurse Anesthetists	OFA03	5.57	60	Consolidate each four or few workstations into single rooms. One workstation per programmed FTE.
Office, Secretary	SEC01	11.15	120	Only if FTE is assigned.
Anesthesia Workroom, Clean	ANCW1	13.94	150	Minimum or 30 NSF per OR.
Anesthesia Workroom, Soiled	ANSW1	9.29	100	Minimum or 20 per OR.
Medication Storage (GP-Phase III)	MEDP1	9.29	100	Minimum. 10 nsf per anesthesiologist or nurse anesthetist.
Anesthesia Gas Storage Full or partially full containers	SRGC2	4.65	50	One per Surgical Suite.
Anesthesia Gas Storage Empty Containers	SRGC2	4.65	50	One per Surgical Suite.
Students' Workstation(s)	OFA03	5.57	60	Per student anesthetist. Max. four students per room.
Pain Clinic				See Section 3.11.
Surgical Suite Administration:				
Conference Room (GP)	CRA01	18.58	200	One per surgical suite. See Section 2.1 for sizing
Student Workstation(s)	OFA03	3.72	40	Per student for the average # of students. Not for surgery residents. (Inpatient Surgical Services only).
Instructor	OFA01 / OFA02	11.15	120	Only if teaching facility and instructor FTE programmed.
Clerical/Secretary Area	OFA03	5.57	60	Per clerk.
Dictation Area	WRCH1	9.29	100	One per every four ORs.
Office, Inpatient Supervisor	OFA01 / OFA02	11.15	120	If FTE programmed.
Nurse Supervisor's Office	0FA01 / OFA02	11.15	120	One per OR Suite.

Surgery (Inpatient and Ambulatory)

FUNCTION	Room Code	AUTHORIZED m^2	AUTHORIZED nsf	PLANNING RANGE/COMMENTS
Surgical Suite Administration (cont)				
Nurses' Workroom	WRCH1	11.15	120	Minimum. Add 40 nsf for each nurse above four assigned to the day shift.
Equipment Workroom	SRE01	9.29	100	Only if authorized Biomedical equipment repairman is permanently programmed FTE.
On - Call Duty Room (GP)	DUTY1	11.15	120	One per on-call personnel FTE programmed.
On - Call Duty Room Toilet	TLTS1	6.50	70	One per On-Call Duty Room. See Section 6.1.
NCOIC/LCPO/LPO Office	OFA01 OFA02	11.15	120	One per clinic/department.
Administrative Office	OFA01 OFA02		varies	Refer to Chapter 2.1. Provide if full time administrative support programmed.

Functions which are required for Residency Education in Anesthesiology (only in a hospital):
The following areas must be programmed if the MTF has a Residency Program in anesthesiology. There are no known cases of this occurring in a facility that does not provide inpatient services. These areas are in addition to those listed under common areas above.

Director of Residency Program	OFA01	11.15	120	Army/Air Force. One per director of Residency Program.
	OFA03			Navy. One per director of Residency Program.
Secretary to Director with visitor waiting.	SEC01	11.15	120	One per Director of a Family Practice Residency Program, if there is an assigned FTE
Residency Coordinator	OFA01	11.15	120	One per assigned FTE.
Residency Research Technician	OFA03	5.57	60	Provide 60 nsf per assigned FTE position.
Resident's Office Space	OFA03	5.57	60	Minimum. Per assigned resident.
Residency Library	LIBB1	13.01	140	One per Residency Program.
Conference Room (GP)	CRA01	18.58	200	Minimum, one per Residency Program. For increased sizing see Section 2.1
Private Administrative Office	OFA01 OFA02	11.15	120	One per FTE assigned.

4.4.6. FORMULAS:

Process: The formula below works for the various types of operating rooms (general surgery neurosurgery, cardiac, orthopedic surgery, cystoscopic and other specialty operating rooms). The number of procedures per day must be determined for each type of room desired and the average length of time for the procedures occurring in that type of room must be determined.

Data required for:

Numbers of General Operating rooms - number of general operating room procedures within a year* (include endoscopic procedures).

Numbers of Special Operating rooms -

a. Number of cardiac procedures per year.
b. Number of neurosurgical procedures per year.

c. Number of orthopedic surgery procedures per year.
d. Number of cysto. surgery procedures per year.

Average Time per Procedure (minutes) - The time per procedure should be obtained via examination of the operating room schedule. The time should be aggregated in groups associated with the types of operating rooms which are being programmed. The average time per procedure must include the time of clean-up and the preparation time.

* Formula assumes that during the reporting period of one year, that surgical procedures will normally occur during 250 days (365 days less weekends and holidays)

Formula For Determining The Required Number of Operating Rooms

$$\text{OR Number} = \frac{(\text{Daily Number of Procedures}) \times (\text{Average Time \{minutes\} per Procedure})}{360 \text{ minutes per day}}$$

For fractions less than half a room, round down. For fractions greater than or equal to half a room round up.

Calculate room requirements for each type of operating room desired separately based on separate procedure data - (general, neuro., cardiac, cysto., orthopedic)

Step 1. Determine the average number of procedures per day by dividing the annual number of procedures by 250 days. Separate and determine for each type of operating room desired (general, neuro., cardio, ortho. or cysto.).
Step 2. Determine the average time it takes to accomplish a procedure of the type desired (general, neuro., cardio, ortho. or cysto.).
Step 3. Insert the numbers attained in steps one and two into the formula and calculate the number of the type of operating rooms required. There may not be fewer than two general operating rooms.
Step 4. Repeat steps one through three for each type of operating room desired (general, neuro., cardio, ortho. or cysto.).

Example: A medical facility accomplishes 6,500 general operating room procedures in one year. Determine the required number of operating rooms (average time is examples only).

Step 1. Average # of procedures per day= $\frac{6{,}500 \text{ Procedures / per year}}{250 \text{ day / year}} = 26$ procedures/day

Step 2. Average time per procedure = 117 minutes for general surgery procedures

Step 3. Number of ORs = $\frac{(26 \text{ procedures / day}) \times (117 \text{ minutes / procedure})}{360 \text{ min.}}$

= 8.45 ORs

Provide 8 general operating rooms.